



Boulder Transit Village Area Plan

Parking Management Case Studies

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INTRODUCTION

Over the next few years, the City of Boulder has a unique opportunity to shape new development for the Boulder Transit Village (BTV) area into a pedestrian and bicycle friendly, transit oriented, live-work community that reduces reliance on the single occupant vehicle. The overriding goal of the project is reduced traffic congestion throughout the area as a consequence of redevelopment.

Throughout the planning process for the Boulder Transit Village Area Plan, the provision of parking and parking management has emerged as a fundamental issue for the City of Boulder. Parking management is a critical component of a successful transit oriented development. Public demands for parking must be balanced with the goal of offering an active Transportation Demand Management (TDM) program that provides a rich mix of appealing and convenient travel options. Successful parking management will support a less auto-oriented community that offers benefits such as supporting neighborhood businesses, encouraging desirable housing and offering the area an identity that attracts visitors.

This case study report outlines best practices in parking management from throughout North America, with a focus on examples where parking management has successfully been integrated with other TDM strategies that influenced the use of other travel options. These examples and ideas will guide planning efforts and alternatives development for the Boulder Transit Village.

Lloyd District, Portland, Oregon

Portland's Lloyd District is across the Willamette River from Downtown Portland, and is home to many mixed use activities including the Oregon Convention Center and the Rose Garden arena. Portland's Lloyd District is slightly less than one square mile, bounded by NE Broadway Boulevard on the north, NE 15th Avenue on the east, I-84 on the south and I-5 on the west. It is comprised a growing residential base and approximately 650 business



Photo compliments of Adam Benjamin

and 17,000 employees with aggressive job growth goals over the next 10-15 years. In 1992, local business leaders and property owners formed the Lloyd District Advisory Committee and set a goal for 20,000 new jobs by 2015. However, the committee quickly realized that the employment goal would be unachievable without a higher use of alternative modes due to inadequate roadway infrastructure. Thus, in addition to the jobs goal, in 1996 local leaders agreed to mode split goals of 42% transit, 10% carpool, 10% bicycle, and 5% walking by 2015. At the time, only 10% used transit and the majority of commuters to the district arrived using single occupant vehicles.

The district has a Partnership Plan that combines travel choice programs in concert with parking management. Due in large part to the economic drivers of the district and the existence of a TMA, this TOD and district has the most aggressive TDM programs and parking management policies in the Portland area. The TMA actively manages area parking via a contract with the City of Portland, with parking revenue generated within the district used to support the TMA and to purchase transit passes for area employees. This was done in concert with the local transit agency which agreed to establish new bus routes to the area per each 2,000 passes purchased.

Parking maximums have been implemented of 2 spaces per 1,000 square feet regardless of use, with no established parking minimum. There is also no free parking anywhere in the district, including residents who participate in a residential parking program. Many developers choose to stick to the maximum while some have actually built new project with no new parking. There has been 100 percent compliance since the maximums were established as the code language specifically prohibits developing any spaces above the maximum. Developers have found that by building at or less than the maximum they realize significant construction cost savings and have also enjoyed the streamlined development process. An additional incentive exists for developers to incorporate provisions for alternative mode uses, for instance inclusion of bicycle parking and facilities is rewarded at a 40 to 1 ratio; building one square foot of a bicycle facility means an additional 40 square feet could be added above the normal Floor Area Ratio maximum.

A total of 13,000 parking spaces exist in the district including 10,500 off street, and 2,500 on street. No new surface parking can be constructed with existing surface lots grandfathered into the new zoning requirements. Local leaders anticipate that an additional 2,300 will be constructed over the next ten years per the job and mode split goals. Today, driving alone represents just over 40 percent of all commuter trips to this area, with transit also at about 40 percent of trips. An additional 4.5 percent use bicycles and the remaining are carpools, walking, telecommute and compressed work week. Today the ratio of parking to office space is 1.9 per 1,000 square feet, down from 4.0 per 1,000 in 1996 -- over 1.5 million square feet of space has been added without a net increase in parking.

Central Platte Valley 63-20 Corporation, Denver

The Central Platte Valley is a 65 acre mixed use urban development adjacent to Lower Downtown Denver. The Central Platte Valley is also adjacent to the future Denver Union Station Intermodal Facility that will be built as part of the Regional Transportation District (RTD) FasTracks Plan. A comprehensive TDM plan is required as part of the Commons Planned Unit Development (PUD) to reduce employee travel to and from the area by single occupant vehicles. As part of the plan, a shared use parking concept was conceived with actual parking controlled and managed by a 63-20 corporation. The corporation will finance the acquisition, construction, equipping and improving of parking facilities in The Commons PUD area. A 63-20 Corporation is a private, not-for-profit corporation created for the purpose of financing public improvements on behalf of a political subdivision.

The operation and maintenance of the parking resources will be assigned, by the 63-20 Corporation, to a Parking District for The Commons PUD area. The Parking District will be governed by property owners in The Commons and have contractual obligations to the 63-20 Corporation. Net revenue from operations (after payment of O&M expenses) are deposited monthly to a debt service fund, to pay bonds, as defined by the 63-20 Corporation. The Parking District will also assume responsibility for the TDM Program. The District will coordinate efforts between the various commercial properties and offer, directly or through contract, the centralized services defined in the TDM Program.

In May, 2000, the City and County of Denver adopted TDM requirements for The Commons area for the purpose of achieving or exceeding the transportation mode split for work trips into and out of the downtown. In 2000, the approximate mode split was 60 percent single occupant vehicle and 40 percent using transit or other travel options. Today the single occupant mode split to Downtown Denver is about 55 percent. This integrated land use and transportation plan incorporates strategies for addressing air quality issues associated with the development while providing high levels of mobility and livability for residents, workers, and visitors, and is consistent with policy established in Denver's Comprehensive Plan 2000 which promotes using TDM to reduce the number of trips made by single occupant vehicles. This goal also reflects the opportunity for increased transit service for residents, workers, and visitors of The Common's neighborhood as a result of the introduction of the new intermodal transportation facility in the Central Platte Valley.

The TDM program must include several components including designation of a program coordinator, implementation of various TDM strategies (including parking management), participating in Downtown transportation meetings and conducting program evaluations. The Program requires a good faith effort. Noncompliance

could result in mandatory actions including such things as financial penalties, parking surcharges, and/or participation in RTD's pass programs.

Funding for the TDM Program will be the responsibility of the Parking District. Funds may be generated by a special assessment of property owners in the area or from excess parking revenue once the bond obligations are fully met.

Fairlee-MetroWest TDM Development Program, Fairfax County, Virginia

A TDM program recommendation was developed for a new mixed-use TOD at the Vienna-Fairfax-GMU Metro Station in Fairfax County, Virginia that will be underway in the near future. The program also evaluated the peak period vehicle trip reduction potential of the proposed project. TDM measures for the development will have an aggressive objective of reducing 47 percent of peak hour residential vehicular trips and 25 percent of peak hour office trips. The trip reduction objectives can be achieved through a combination of physical design characteristics of the site and the full application of the TDM program. A number of recommendations comprised the TDM program, including a comprehensive parking management component. The parking management program suggestions were divided into residential, office and general recommendations.

Residential Buildings:

- Limit condo units to one parking space as a bundled asset sold with the purchase of each condo unit. For additional spaces, explore graduated market-rate pricing scale for purchase and/or leasing arrangements for access to spaces in excess of one per unit.
- For rental apartment units, develop a graduated monthly parking fee scale for all dedicated parking spaces.
- Provide dedicated, free preferential parking spaces in convenient locations for vanpools.

Office Buildings:

- “Unbundle” leasing and pricing for office space from leasing and pricing for parking spaces.
- Provide for loading/unloading of carpools and vanpools.
- Provide dedicated, preferential parking spaces in convenient locations for carpools and vanpools.
- Develop parking rate agreements charging single-occupant vehicles market rate pricing, along with graduated parking discount of 50% for carpools and 100 percent for vanpools. A verification and monitoring system would be incorporated.

General Recommendations:

- Develop a comprehensive parking management plan that documents the integration of parking management strategies across all site uses, coordinate with Metro to assess need for measures to discourage use of Metro parking garage by residents and employees in the development, management of permitted uses in all locations, utilization of market rate pricing for all non-residential spaces and disbursement of on-street parking meter revenues to the TDM program.
- Provide permanently dedicated, on-street parking spaces for shared car vehicles, taxis, and vanpool loading/unloading.
- Provide height clearance for vans within garages
- Provide parking management by time and price for all on-street spaces.

Long-term program monitoring and enforcement is included in the TDM plan. Traffic counts and biennial surveys assessing residential and employee travel behavior will be conducted to determine mode splits and TDM program evaluation. In addition, a TDM program manager will be appointed and will be required to submit budgets and work plans for the program to ensure that all elements of the development agreement related to the program remain in place. Residential HOA fees and office CAM fees will provide long term program funding. Upon receipt of the biennial reports, Fairfax County should determine continued compliance with the core elements of the TDM program funding and staffing. A finding of non-compliance would render the area in violation of the site’s zoning codes and would be subject to standard County zoning enforcement processes.

Metropolitan Place, Renton, WA

The Renton TOD, Metropolitan Place, is located across the street from the Renton Transit Center in downtown Renton, WA, just south of Seattle.



Metropolitan Place includes 4,000 square feet of ground-level retail space and 90 apartments above a two-story garage with 240 parking stalls. 150 of the stalls are dedicated to Park & Ride uses during the day, with the remaining available for shared parking amongst the commercial and residential uses. Residential parking was built at 1 stall per unit. Parking around the site is fee based with nominal charges (maximum of \$6.00 per day).

Various pedestrian amenities, bicycle lockers and a coffee shop are included on site. When the project opened, shared car vehicles were provided, but no longer operate due to low usage levels. The results of this TOD show that one third of residents use transit, which is approximately three times the transit mode share of similar, suburban multi-family residential projects in the area. Residential parking stall usage is 0.6 stalls per apartment unit, suggesting a degree of self-selection to reside at a TOD location and reduce auto ownership requirements.

Pleasant Hill, Contra Costa County, CA

The Pleasant Hill station area currently consists of four residential buildings and one retail site served by heavy rail (BART) and several express and local fixed bus routes. The residential site ranges from high-intensity market rate condos to affordable apartment housing. Each site is located within ¼ mile of the transit station, with pedestrian connectivity considered fair to good. Parking ratios range from 1 space per unit to 1.9 spaces per unit among the four sites. Densities in the surrounding areas are relatively low (about 9 residents and about 5 employees per acre). The area today has significant surface park-n-ride parking capacity. The area is currently undergoing a second phase of planning and development, which promises to improve the station's connections to the surrounding community by structuring park-and-ride facilities to make room for a walkable mixed-use development. Depending on market conditions and public approvals, the pending development will add between 290,000-456,000 square feet of office space and either 274 or 446 apartments and for-sale townhouses to the station area. It will also add a child care facility and about 42,000 square feet of ground floor retail and restaurants. TDM services for the area are provided by Contra Costa County and by the regional metropolitan planning organization (MTC). A recent survey of residents found that about 60 percent of residents worked for employers that allowed them flexible arrival / departure times, and 20 percent provided some form of transit subsidy assistance.

Data from recent surveys of residents at all four residential locations found that nearly 45 percent of residents utilize transit for the commute to work, and about 49 percent drive alone to work. For non-work trips, surveys show about 71 percent of trips completed by single-occupant vehicle, yet higher levels of "trip chaining" for these trips (25 percent of non-work trips were linked to other trip purposes, versus only 15 percent of work trips linked to other trip purposes). Higher levels of SOV

use for non-work trips are likely associated with poor availability of nearby retail services.